SUBINTIMAL ANGIOPLASTY
is the best and cheapest treatment for Fem-Pop and BTK lesions

How to LEAVE and RE-ENTER the lumen

Amman Bolia

SUBINTIMAL ANGIOPLASTY
has stood the test of TIME
1987 → 2015 (28 yrs) and counting

How many techniques / Devices can match this?
• Lasers (Hot tip, bare fibre etc)
• Atherectomy
• Brachytherapy
• Rotating devices
• Freezing, Scoring, Cutting balloons
• Stents (DES, Covered)
• DES
• etc etc ...........

SUBINTIMAL ANGIOPLASTY
BROAD INDICATIONS

FEMORO-POPLITEAL Occlusions
• Flush Occlusions
• Long Occlusions
• Common Femoral Bifurcation Occlusions

BTK Occlusions
• Long Tibial Occlusions
• Bifurcation/Trifurcation Occlusions
• Multiple Tibial Occlusions

SUBINTIMAL ANGIOPLASTY
DURABILITY

BTK
• Durable and excellent Limb Salvage rates
• 85-90% Salvage rates in CLI

F-P Occlusions
• 70% unaided Patency at 1 yr
• Improved secondary patency with good surveillance programme (64% at 5yrs – Florenes)

BEST ?

Various Reasons
• Broad Indications
• Durability
• Repeatability

Disclosures

Consultant to MERIT MEDICAL
23-01-2012 (Pt. with CLI)

OPTIONS

- Stents (which, how many, DES)
  - fractures, crossing knee joint, intimal
  - hyperplasia/re-occlusion, costs
- Atherectomy
- SIA + DEB
- SIA (POBA)

23-01-2012 (post SIA)

26-01-2015 (3 years later!)
(now only a Claudicant)

SUBINTIMAL ANGIOPLASTY

REPEATABLE

- SIA can be repeated a number of times
- Applies to SFA / POP segment and BTK
  (c.f. an Occluded STENT usually ruins further ENDO options)
SUBINTIMAL ANGIOPLASTY

Cheapest?

Undoubtedly

SFA Angioplasty (material costs)

- One Part Needle
- Standard Teflon Coated Guidewire (0.035)
- Hydrophillic Curve tipped Guidewire (0.035)
- 4F Mini-Cath
- 5F Balloon catheter
- Simple Inflation Device
  - $118
  - + Sheath
    - $133

SFA Angioplasty

<table>
<thead>
<tr>
<th>Material</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>One Part Needle</td>
<td>$7.50</td>
</tr>
<tr>
<td>Standard Teflon Coated Guidewire (0.035)</td>
<td>$118</td>
</tr>
<tr>
<td>Hydrophillic Curve tipped Guidewire (0.035)</td>
<td>$45.00</td>
</tr>
<tr>
<td>4F Mini-Cath</td>
<td>$118</td>
</tr>
<tr>
<td>5F Balloon catheter</td>
<td>$133</td>
</tr>
<tr>
<td>Simple Inflation Device</td>
<td>$118</td>
</tr>
<tr>
<td>Sheath</td>
<td>$133</td>
</tr>
</tbody>
</table>

TIBIAL Angioplasty (material costs)

- One Part Needle
- Standard Teflon Coated Guidewire (0.035)
- Hydrophillic Curve tipped Guidewire (0.035)
- 1.5mm Hydrophillic Guidewire (0.035)
- 4F Mini-Cath
- 5F Balloon catheter
- Simple Inflation Device
  - $172
  - + Sheath
    - $187

SFA + TIBIAL Angioplasty (material costs)

- One Part Needle
- Standard Teflon Coated Guidewire
- Hydrophillic Curve tipped Guidewire
- 1.5mm Hydrophillic Guidewire
- Mini-Cath
- 5F Balloon catheter (X2)
- Simple Inflation Device
- Sheath
  - $241

SUMMARY

Pt. with IC or CLI (Infrainguinal Angioplasty)

- SFA Angioplasty = $120
- TIBIAL Angioplasty = $190
- SFA + TIBIAL = $240
**SUBINTIMAL ANGIOPLASTY**

( Pt. with CLI )

<table>
<thead>
<tr>
<th>PRE</th>
<th>POST</th>
</tr>
</thead>
<tbody>
<tr>
<td>![PRE Image]</td>
<td>![POST Image]</td>
</tr>
</tbody>
</table>

( Total Device cost < $250 )

**HOW?**

- **ENTRY**
  - Soft / Hard wire tip, J-wire, Cath or Cath / wire combi
  - Somewhat aggressive approach
  - Curved cath. Pointed away to avoid collateral entry

- **RE-ENTRY**
  - Loop absolutely essential, in a Hydrophilic wire
  - Twisting & Pushing action (= Screwing)
  - Aim for disease free segment (more favourable)

**PEDAL Puncture – limitations**

(can only deal with ONE run-off vessel )

- Bifurcation Reconstitution
- Trifurcation reconstitution

**SUBINTIMAL ANGIOPLASTY**

- **Conclusion:**
  - Wide APPLICATION
  - REPEATABLE
  - DURABLE
  - CHEAP ( + ? Long term cost saving)